

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Casper KILDEGAARD Examiner: Sean Jerrard Younger
U.S. Serial No. : 10/586,090 Art Unit: 3745
File No.: 706171.000160
For: **MONITORING THE OPERATION OF A WIND ENERGY PLANT**
CUSTOMER NO.: 29540

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AMENDMENT

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SIR:

In response to the office action of February 19, 2010, Applicant submits this
Amendment with a request for a two month extension of time.

DRAFT**In the Claims:**

Please kindly amend the claims as follows:

1. (currently amended) A method of monitoring the operation of a wind energy plant, wherein the monitoring comprises collection of blade-related operational data, characterized in that,

~~in at least one or more positioning indicators are arranged at a corresponding one or more predefined points point of the blade, [[a]] position indicators indicator is arranged that can be used in a positioning system for directly identifying, by a positioning system, the position of each of the individual one or more position indicator indicators; and that~~

~~the position of the position indicator and hence the position of the one or more predefined point is points on the blade are directly determined and collected from the position of the corresponding one or more position indicators and collected as a part of said blade-related operational data;~~

whereby flexing and/or rotational speed of the blade is determined.

2. (currently amended) A method according to claim 1, wherein the position of the one or more at least one predefined points point is used in a control- and regulation-algorithm for controlling the wind energy plant.

3. (currently amended) A method according to claim 1, wherein the position of the ~~at least one or more~~ predefined ~~point~~ points is used for determining material stresses in the blade by determining the flexing of the blade, wherein the method comprises the following steps:

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- comparison of the collected position of the predefined point to a predefined reference position of that point;
- based on the comparison of the collected position to the predefined reference position, determination of the flexing and hence the material stress on the basis of deviations between the collected position and the predefined reference position.

4. (currently amended) A method according to claim 3, wherein the ~~at least one~~ or more predefined reference ~~positions~~ position is/are determined and collected positions of the one or more predefined ~~point~~ points when the wind energy plant is in operation in a situation which is viewed as being a reference situation.

5. (currently amended) A method according to claim 1, wherein the positioning system comprises one or more reference points wherein the positions of the reference points are known, and wherein the position(s) of the ~~at least one~~ or more predefined ~~point~~ points on the blade is/are determined by use of the distance from the reference points to the position indicator.

6. (currently amended) A method according to claim 5, where determination of the position of the ~~at least one~~ or more predefined ~~point~~ points on the blade further comprises use of the position of the wind energy plant.

7. (original) A system for monitoring the operation of a wind energy plant, wherein the system comprises means for collecting blade-related operational data, characterised in that,

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~~in at least one or more position indicators are arranged at a corresponding one or more predefined point points on the blade, a position indicator is arranged, wherein the position indicator can be used in a positioning system for directly identifying, by a positioning system, the position of each of the individual one or more position indicator indicators, and~~

~~said~~ means for collecting blade-related operational data ~~comprise~~ comprises means for collecting the position of the position indicator and hence the position of the predefined point

whereby flexing and/or rotational speed of the blade is determined.

8. (currently amended) A system according to claim 7, wherein the system comprises one or more reference points, wherein the positions of the reference points are known, and wherein the position(s) of the ~~at least one or more predefined points point~~ on the blade is/are determined by use of the distance from the reference points to the position indicator arranged in the predefined point.

9. (previously presented) A system according to claim 7, wherein the positioning system is GPS, and wherein the position indicators are GPS receivers.

10. (currently amended) A blade for a wind energy plant, wherein the blade enables monitoring of the operation of a wind energy plant, wherein the monitoring comprises collection of blade-related operational data, characterised in that,

~~in at least one or more positioning indicators are arranged at a corresponding one or more predefined point points on the blade, a position indicator is arranged that can be used in a~~

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~~positioning system~~ for directly identifying, by a positioning system, the position of each of the individual one or more position indicator indicators, and

~~that~~ the position of the one or more position indicator indicators and hence the position of the one or more predefined point points are determined and collected as a part of said blade-related operational data;

whereby flexing and/or rotational speed of the blade is determined.

11. (original) A blade for a wind energy plant according to claim 10, wherein the positioning system is GPS; and wherein the position indicators are GPS receivers.

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REMARKS

TBD

In view of the above, it is respectfully submitted that the application as amended herein is in condition for allowance. A relatively early notification of allowance is respectfully requested.

Respectfully submitted,

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